

REMARKS

Applicant's representative wishes to thank Examiner Phillips for courtesies extended in a telephonic interview with Thomas Fisher (Reg. 47,564) on January 22, 2008 in which claim 1 was discussed.

Claims 1-12 are currently pending in the application. Claims 1-12 are rejected over cited prior art references.

Applicant amends claims 1 and 7, and claims 8-12 to correct improper terminology in the preamble.

Applicants further requests consideration of newly added claims 21-28.

As such, after entry of these amendments, claims, 1-12 and 21-28 will be pending.

Applicant respectfully requests reconsideration and allowance of all pending claims.

New Claims

Newly added claims recite entitled aspects of the current invention.

Specifically, dependent claims 21 and 25 further recite that the general computing system includes a general system processor and a power management unit. Support for these claims can be found in the specification at paragraph [0020] and [0021].

Dependent claims 22 and 26 further recite that the modem computing subsystem include a modem subsystem processor. Support for these claims can be found in the specification at paragraph [0020].

Dependent claims 23 and 27 further recite that the shared memory modules include arbitration blocks. Support for these claims can be found in the specification at paragraph [0033].

Dependent claims 24 and 28 further recite that the shared memory modules include Dynamic random Access Memory (DRAM). Support for these claims can be found in the specification at paragraph [0032].

Objection to Claim 1

Claim 1 is objected to based on the phrase "may be" in line 8 of the claim. Applicant has rephrased the language in claim 1. However, the functionality of the shared memory module has been changed such that use of the term "may be" has been appropriately changed to -- is --, as suggested by the Examiner. Thus, Applicant respectfully requests that the Examiner withdraw

this objection.

Rejections Under 35 U.S.C. §103

Claims 1-9 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent Application Publication No. 20030008690 published in the name of Guterman et al. (hereinafter the Guterman publication) in view of United States Patent No. 6,920,572 issued in the name of inventors to Nguyen et al. (hereinafter the Nguyen patent). Applicants respectfully traverse the rejection and submit that the Guterman publication and the Nguyen patent, taken alone or in combination, fail to teach, suggest or render obvious the present invention as claimed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference, or references when combined, must teach or suggest all of the claim limitations. Applicant believes that a *prima facie* case of obviousness cannot be maintained, because the references, whether alone or in combination, fail to teach or suggest all claimed features, and there is no suggestion nor motivation to modify the references in a manner that would result in Applicant's claimed invention.

Neither the Guterman Publication nor the Nguyen Patent Teach or Suggest a Clock and Power Control Unit disposed in the Modem Computing Subsystem and Operable to Gate Clocking within the Modem Computing Subsystem and to the Shared Memory Module when Modem Functionality is Not Enabled.

Independent **Claims 1 and 12** recite a system or wireless device including a clock and power control unit disposed in the modem computing subsystem. The clock and power control unit is operable to gate (i.e., shut off) clock functions within the modem computing subsystem and to the shared memory module when modem functionality is not enabled. Support for this subject matter can be found in the specification at [0025], lines 4-7, which state, "The clock/power control unit 230 is used to conserve power by gating (i.e., shutting off) the clock

250 to the modem subsystem processor 204 and the clocks 116-122 to the shared memory modules 108-110, respectively, during times when these modules are not needed for operation of the modem portion of the system 100.” As noted, the clock and power control unit is utilized in conserving power by not clocking the modem computer subsystem and the shared memory module when these modules are not required to be functional for operation of the modem portion of the system or device.

Neither the Guterman publication nor the Nguyen patent alone or in combination describe or suggest a system or device that includes a clock and power control unit disposed in the modem computing subsystem. The clock and power control unit is operable to gate (i.e., shut off) clock functions within the modem computing subsystem and to the shared memory module when modem functionally is not enabled. This claimed structure is not taught nor suggested by Guterman or Nguyen, whether alone or in combination.

In particular, Guterman is limited to a teaching of a system that includes power control software 26 which alters activities on one of two subsystems, such as the communication and application subsystems, in view of information exchanged between the two subsystems. (Guterman, paragraph [0020], lines 205). The information exchanged between the two subsystems includes power consumption status, such as the duration of a particular power consumption state, a schedule of power consumption state changes or information indicating the probabilities of a particular state change or other activities that may effect power consumption (Guterman, paragraph [0022], lines 1-12. Further, the Guterman patent teaches at paragraph [0029], lines 1-13 that, “[t]hus, the software 54, which may be run by the application subsystem, in one embodiment, begins by determining whether a power down advisory has been received as indicated in FIG. 4 at diamond 56, in one embodiment. If so, and if an active task is received as indicated in diamond 58, a check determines whether or not it is possible to synchronize the execution of the active task with the sleep schedules or power down schedule of the communications subsystem as indicated in diamond 62. If so, the task may be delayed or otherwise rescheduled and then the power down may proceed as indicated in block 60. Otherwise, if no synchronization is determinable, the system may just proceed in any case.” Thus, it is readily apparent that the software described in the Guterman publication, such as the

power control software is not equivalent to the clock and power control unit of the present invention, in that the software described in the Guterman patent does not gate clock functions within the modem computing subsystem and to the shared memory module when modem functionality is not enabled. Thus, the Guterman publication does not teach or suggest a clock and power control unit disposed in the modem computing subsystem and operable to gate clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled.

Further, the Nguyen patent is limited to a teaching of a clock tree that permits selective portions of a DSP device to be disabled by halting their clock signals. As taught by the Nguyen patent at column 4, lines 58-65, “[w]hile a gate signal is asserted, the corresponding internal clock signal is inverted and amplified to drive the clock signal to the desired destination. When a gate signal is de-asserted, the corresponding buffer is disabled and the output signal from the buffer is held constant. By enabling and disabling individual buffers 306-320, various portions of DSP chip 100 can be shut down.” However, the clock tree taught by the Nguyen patent is not equivalent to the clock and power control unit claimed in the present invention in that the clock tree is not *disposed in the modem computing subsystem* and is further not operable to *gate clocking within the modem computing subsystem and to the shared memory module* when modem functionality is not enabled. (Emphasis added to show distinguishing characteristics).

Therefore, since neither the Guterman publication nor the Nguyen patent teach or suggest a clock and power control unit disposed in the modem computing subsystem and operable to gate clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled, independent claim 1 and 7 are believed to be allowable. Applicant respectfully requests reconsideration and allowance of claims 1 and 7. Claims 2-6, 8-9, are believed allowable for at least the same reasons as presented above with respect to Claims 1 and 7 by virtue of their dependence, either directly or indirectly, from Claims 1 and 7. Additionally, each of these claims separately recites a combination of subject matter not disclosed or suggested by the cited references. Thus, Applicant respectfully requests reconsideration and allowance of claims 2-6 and 8-9.

Claims 10-12 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Guterman in view of Nguyen and further in view of Bays et al. It is respectfully submitted that claim 7, from which claims 10-12 depend, is patentable over Guterman in view of Nguyen and that Bays et al. does not cure the defect of lacking any description or suggestion of a system or device that includes a clock and power control unit in the modem computing subsystem and operable to gate clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled. As such, claims 10-12 are patentable over the cited references for at least the same reasons. Additionally, each of these claims separately recites a combination of subject matter not disclosed or suggested by the cited references. For example, referring to claim 10, there is no combination of the cited references that discloses the recited subject matter of “a second shared memory module, wherein the second shared memory module is independently accessible by the general computing subsystem and the modem computing subsystem, wherein the second shared memory module can be disabled by the general computing subsystem to save power.”

Therefore, based on the above remarks, the rejection of claims 10-12 should be withdrawn.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application and all of the claims are in condition for allowance. Reexamination and reconsideration of the application are requested.

If there are any fees due in connection with the filing of this response, please charge such fees to our Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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By: /Charles D. Brown, 28,285/
Charles D. Brown, Reg. No. 28,285
for Abdollah Katbab
Registration No. 45,325
(858) 651-4132

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Facsimile: (858) 658-2502